

EUROPEAN PATENT OFFICE

Patent Abstracts of Japan

PUBLICATION NUMBER : 03037433
PUBLICATION DATE : 18-02-91

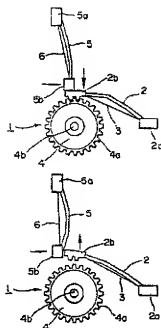
APPLICATION DATE : 30-06-89
APPLICATION NUMBER : 01169173

APPLICANT : SONY CORP;

INVENTOR : SENSHIYUU YUICHIROU;

INT.CL. : F16D 65/18 G11B 15/22

TITLE : BRAKE DEVICE



ABSTRACT : PURPOSE: To enhance thinning and reduction in weight of the whole device and simplification of the structure by braking a rotating body by the elastic deformation of a first elastic body by a linear shape memory alloy contracted by electrification, keeping the braked state by a second elastic body, and releasing the braked state by the elastic deformation of the second elastic body.

CONSTITUTION: When the linear shape memory alloy 3 of a first elastic body 2 is electrified, the shape memory alloy 3 is contracted, the elastic body 2 is elastically deformed and curved in the arrowed direction, and its top end part 2b is engaged with the teeth part 4a of a gear 4 to brake the gear 4. At this time, a second elastic body 5 is in a restored state, and the front surface of its top end part 5b is touched by the back surface of the top end part 2b of the elastic body 2 to keep the braked state. When a linear shape memory alloy 6 of the elastic body 5 is electrified, the shape memory alloy 6 is contracted, the elastic body 5 is contracted, elastically deformed, curved, and separated from the elastic body 2. Hence, the elastic body 2 is restored to release the brake of the gear 4. The front surface of the top end part 2b is touched by the back surface of the top end part 5b of the elastic body 5 to keep the elastic deformation of the elastic body 2.

COPYRIGHT: (C)1991,JPO&Japio